

## Why Use Glass?

Glass is universally accepted as the healthiest and most environmentally sustainable of all types of food packaging.

While it's true that glass is heavy to ship, it has many advantages over plastic.

- A longer shelf-life, compared to plastic
- It's hygienic, and free from contamination
- It maintains original the original flavor and purity of the product
- It allows transparency for product viewing

But to us here at Ethan's, the most important feature of glass is that it won't leach chemicals into your food and drink.

While plastic is lightweight, unbreakable, easily portable, and really convenient, research has shown that all plastics have the potential to migrate chemicals into the foods and drinks you consume. No plastics can be guaranteed to be free of this migration potential.

Here's more than you wanted to know about plastic packaging:

- It comes in a wide variety of forms-- jugs, boxes, bags, cartons, tubs, egg cartons, microwavable trays, boil-in-the-bags, and food pouches. The types of plastics used vary depending upon use and food category.
- The most common food packaging plastics are PET (polyethylene terephthalate), PE (polyethylene), and PP (polypropylene). PVC (polyvinyl chloride), PS (polystyrene), and polycarbonate are also used, but to a lesser extent.
- Many known and unknown chemicals in plastic show estrogen activity. While BPA (bisphenol A) is the most well-known estrogen disrupting chemical, there are hundreds of chemicals that also show hormonal activity.
- Studies show that all types of plastics, including BPA-free, have the potential for estrogen activity. In a landmark 2011 study, 92% of all plastics showed estrogen activity. "BPA-free" usually means the manufacturers have substituted a similar chemical, such as BPS or BPF, for the BPA. These kissing cousin chemicals have similar effects as BPA on human tissue.
- PET plastic is the most common plastic used for beverage containers. PET may be used in some laminates for bags or pouches. Studies show that several contaminants have been associated with PET, including formaldehyde, acetaldehyde, antimony, UV stabilizers, and polybrominated dimethylesters (PBDE). For substances like antimony, time, temperature, and acidity (such as you find in vinegar and tomato sauce) increases migration into the food product. Antimony has been classified by the National Toxicology Program as 'feasonably anticipated to be a human carcinogen'.
- Plastic bottles are likely to contain more than liquid. Researchers tested 11 brands of popular brands of bottled water and found an average of more than 325 plastic particles per liter of water. Hundreds of microscopic bits of plastic in each gallon of bottled drinking water—yuck.

Good old glass, made from simple, natural materials, such as sand, limestone, and soda ash. It's the food packaging of choice for consumers looking for high-quality, pure food and beverages.

At Ethan's, we do the research so you don't have to. But if you're interested in learning more about plastic packaging and food, see these references below:

- 1 https://www.sciencedaily.com/releases/2014/02/140219205215.htm
- 2-https://www.foodpackagingforum.org/food-packaging-health/food-packaging-materials/plastics/common-contaminants
- 3 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222987/
- 4 https://www.researchgate.net/publication/283854359 The Facts about PET
- 5 http://www.doiserbia.nb.rs/img/doi/1451-9372/2012/1451-93721100057r.pdf
- 6 https://link.springer.com/article/10.1186/s40201-014-0133-3
- 7 https://www.foodpackagingforum.org/news/antimony-in-food-packaging
- 8- https://ntp.niehs.nih.gov/ntp/about\_ntp/monopeerrvw/2018/january/antimonydraftmonograph.pdf
- 9 https://www.satra.com/spotlight/article.php?id=424
- $10-\ https://www.theguardian.com/environment/2018/mar/15/microplastics-found-in-more-than-90-of-bottled-water-study-says$